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BRONCHITIS.

FROM DR. GERHARD'S LECTURES ON THE EXPLORATION AND TREATMENT OF DISEASES
OF THE CHEST.

THE term *bronchitis* is, in common parlance, applied to various affections of the respiratory organs, as laryngitis, several affections of the lungs, &c.; but it should never be used in this way by physicians, as it is vague and unphilosophical: the term should be confined to inflammation of the mucous membrane of the bronchial tubes.

Bronchitis, like all other inflammations, is divided into *acute* and *chronic*. The acute has been sub-divided in reference to the greater or less quantity of the secretion, and its epidemic or sporadic nature. The first division is of very little importance; but the second is well founded, as the disease is much more serious when it occurs in an epidemic form. In the epidemic bronchitis, to which the name influenza has been given, the severity of the constitutional symptoms is by no means proportioned to the intensity of the local lesion—the latter in many cases being very slight, while the former are sufficient to confine the patient to his bed for several days. The constitutional symptoms are pains in the back, &c., high fever, and extreme prostration.

We have no opportunities of examining the anatomical lesions in simple acute bronchitis, as the disease is seldom or never fatal. On this account we can only study them in cases in which it is secondary to other grave diseases, and in these cases we often meet with every stage of bronchitis. In this disease the mucous membrane itself is chiefly involved, and not the subjacent tissue, as is the case in serous inflammations. The lesions observed are injection of the mucous membrane, ecchymoses, thickening, and induration. The last mentioned lesion is inferred from analogy to occur in primary acute bronchitis, as it cannot be demonstrated; but in cases where the affection is secondary to some other disease, we frequently meet with it. These lesions are more marked in the minute than in the large bronchial tubes, although the signs of inflammation of the larger tubes may have been very decided before death.

In anemic patients, the mucous membrane, instead of presenting increased redness, is found to be pale; the only change which is perceived is the opacity of the membrane, which, in a healthy state, is almost transparent. This appearance is not at all uncommon in persons whose blood is deficient in red globules at the time of the occurrence of the affection.

In acute bronchitis ulceration rarely takes place, although it is by no means unfrequent in the chronic form of the disease. It is almost entirely confined to those acute forms which have a specific character, such as bronchitis, complicating rubeola and variola. In these cases the ulcers are at first confined to the follicles, although they sometimes extend themselves, and acquire an irregular outline, involving the surrounding membranes. Ulceration affects principally the trachea and larger tubes, where the follicles are well developed, and rarely extends to the minuter ramifications of the bronchial tree. I shall not dwell upon this lesion at present, as it does not deserve much attention in this place. There is, however, another modification of much more importance, viz., the effusion of lymph and formation of false membrane. This form of inflammation, which has been termed diphtheritis, occurs also in severe cases of croup.

When bronchitis commences in the small tubes, and extends upwards towards the larynx, it is not unfrequently fatal; but when it follows the opposite course, beginning at the larynx, and extending downwards, it may be arrested, and the disease will almost always terminate favorably. Inflammation of the bronchial mucous membrane is in some cases attended with a serous effusion, which, occurring under the membrane, gives rise to œdema: when this takes place in the upper portion of the larynx, it constitutes œdema of the glottis. Bronchitis tends, in most cases, to get well without the formation of pus. Its progress is as follows: at the commencement of the inflammation the membrane is injected and thickened, and its secretion is arrested. An increased secretion then takes place, which is intended by nature to relieve the turgescence of the vessels: if the inflammation continues, the secretion then becomes opaque; if it is not arrested at this stage, but still goes on, purulent globules are mixed with the mucus, and in more protracted cases pure pus is secreted. The expectoration, however, is never found to consist of pus alone, because, although certain parts of the membrane secrete pure pus, yet before it is expectorated it is mixed with mucus from other portions.

Bronchitis may occur as a primary disease, or as secondary to some other affection of the lungs. When it occurs as a primary affection, it may either terminate in perfect recovery, or may give rise to the development of some lesion of the parenchyma of the lungs, such as pneumonia or phthisis. The former is the more common termination, but the latter is not unfrequent.

In other cases the bronchitis supervenes on one of these affections. This distinction is of the greatest importance in forming a prognosis; for when the disease is secondary, it is merely a part of the tuberculous disease; when it precedes this affection, it may proceed to a certain length, and the tubercles may then be arrested.

We now come to the signs which indicate acute bronchitis. These may be divided into *general* and *local*. The general signs are febrile excitement, with its attendant symptoms of enfeebled strength. The local signs are cough, expectoration, soreness of the chest, with the physical changes in the respiratory sound. In treating of the local signs, I shall

first consider those connected with obstructions to the passage of air through the tubes. The sonorous rhonchus is generally heard in the first stage of acute bronchitis; it is produced by the thickening of the mucous membrane of the larger portions of the tubes, which contracts their calibre, and thus impedes the passage of air through them. I described this rhonchus in a previous lecture, and pointed out its distinctive characters. As it often occurs first at the root of the lungs, where bronchial respiration is loudest in pneumonia, you may, without you are attentive to the distinctive characters which I have laid down, mistake it for the latter sound: it is important to bear this in mind. The sonorous rhonchus is heard in the larger tubes; but when the inflammation extends to the smaller tubes, a sibilant rhonchus is produced, which is caused by the same physical condition as the sonorous, but differs from it on account of the smaller calibre of the tubes in which it occurs.

Although these rhonchi are very frequent, yet if you expect to meet with them in all cases of acute bronchitis, you will be egregiously mistaken, because the thickening must reach a certain point before the sound is developed, and therefore if it does not proceed thus far, no rhonchus will be heard. Feebleness of respiration is a more constant sign in bronchitis: it results from the air not passing freely through the tubes; and, like the rhonchi themselves, this sign is extremely variable, shifting from one portion of the lung to another, as it is temporarily influenced by the efforts of breathing, which force the air into the lungs, and for a time clear the tubes. In this affection, the chest sounds perfectly clear on percussion in the first stage; it, however, becomes somewhat dull in the second, but the alteration is very slight.

In the second stage of the disease, secretion takes place into the bronchial tubes, which gives rise to the moist rhonchi, mucous and sub-crepitant. The former, like the sonorous rhonchus, is produced in the larger bronchial tubes—the latter in the smaller. The sub-crepitant rhonchus resembles very much the crepitant, which is peculiar to pneumonia: this renders the diagnosis somewhat difficult, as the cases in which it occurs, simulate pneumonia very much. When, however, the bronchitis is of considerable extent, it does not resemble pneumonia so closely, for the latter disease scarcely ever extends to a large portion of both lungs, as is often the case with bronchitis.

After the secretion from the mucous membrane occurs, the thickening subsides, and the respiration gradually returns to the normal state, but, for a time, it may be more or less mixed with moist rhonchi—that is, the mucous and sub-crepitant. These gradually cease as the resolution of the disease advances.

The expectoration in acute bronchitis is very variable: at first, as the cough is dry, there is little or no expectoration; but as the disease advances towards resolution, or passes into a more chronic variety, the expectoration becomes much more abundant, and consists of sputa which are almost peculiar to this disease. When the disease is still slight, or if it remain stationary, the sputa are generally transparent, and consist merely of thin mucus. As soon as it tends decidedly towards resolution, or if,

instead of tending towards resolution, it assumes a sub-acute form, and becomes chronic, the character of the sputa changes—they become more thick and opaque, and of a whitish color. If the disease be very intense, a small quantity of purulent matter is sometimes mixed with the sputa, and they assume the muco-purulent character. In these cases their form is irregular, and the thicker portion is generally diffused in irregular shreds through the thinner part. As the disease declines, the sputa gradually become less and less abundant. If the inflammation be very violent, the secretion from the bronchial tubes becomes almost of the consistence of coagulable lymph, and is firm, and moulded into the form of the bronchial tubes; these tubes, or polypi, as they are sometimes called, indicate a high degree of inflammatory action.

The local signs of primary acute bronchitis, differ but little from those of other forms of the disease, such as the chronic, &c., but the general signs are somewhat different—they are generally very well developed in epidemic cases, and are very slight in the sporadic. The patient is first taken with a chill, which is followed by febrile excitement, thus resembling other inflammations, as well as those of serous membranes and the substance of the lungs, although it is of much less intensity. The patient, then, has slight fever, and sensations of chilliness occurring at different times, restlessness, heat in the palms of the hands, &c. The condition of the pulse is in perfect correspondence with the moderate fever, rarely exceeding eighty or ninety in the minute. In epidemic bronchitis the condition of the patient may be very different; the pulse is often small, compressible, and frequent; there is great prostration and disturbance of the nervous system; and, consequently, the tolerance of loss of blood is much less than in serous inflammations. There are other symptoms depending upon the febrile excitement, such as anorexia, thirst and headache.

There is another set of symptoms which is secondary, and belongs to affections of the other tissues, principally the serous: of these the inflammation of the pleura is the most common, producing pain, which is increased during the act of inspiration. The pleurisy supervening on or complicating bronchitis, is very slight, and is usually dry; when the pleurisy is considerable, it is looked upon as the primary disease, of which the bronchitis is a complication. This accidental pleurisy may prove a cause of death in certain cases; when, for instance, there is hypertrophy of the heart, or when the patient is loaded with fat, it produces this catastrophe by increasing the dyspnoea which usually attends bronchitis, when it attacks the same individuals. The danger in these cases arises chiefly from the pain which impedes the respiration; in simple bronchitis the pain is slight, and often limited to a mere soreness.

Acute bronchitis generally lasts but a few days, and its termination is in most cases favorable. It sometimes, however, runs into the chronic form. This may depend upon the peculiar susceptibility of the patient to inflammation of the mucous membrane, or the unfavorable hygienic circumstances in which he is placed. In some cases it leads to the development of tubercles in the lungs; this, most commonly, is owing to a decided tuberculous diathesis of the individual affected with it.

The treatment of bronchitis is simple, and will occupy us but a short time. You will find in books generally a regular course laid down for the treatment of this affection—the first step of which is, in severe cases, the abstraction of blood. Bleeding is unquestionably a most useful remedy; but it should not be prescribed for all patients indiscriminately, for the milder cases get well very rapidly without it. We should only resort to it in severe cases, for there are other means by the use of which we may cause the disease to abort. These consist chiefly of the nauseating and stimulant expectorants and diaphoretics. In most cases I prefer the vegetable diaphoretics, aided by hot pediluvia, and generally make use of an infusion of eupatorium and sanguinaria, or eupatorium and seneca, after the following formula: R. Eupator. perfol., Rad. senegæ, aa ʒss. M., et infunde in aq. bull. Oj. A tablespoonful or two may be given every hour, or a larger dose less often. Ipecacuanha and tartarized antimony produce a decided effect on the disease. The latter is not always well borne, and ought to be used in large doses only in severe cases, as it may cause much irritation of the stomach. I give it usually in very small doses, sometimes in lemonade or neutral mixture, the object not being to excite severe nausea, but to produce a sedative effect. Dr. Physick has the credit of originating a remedy which was much used at the Almshouse Hospital some years ago. It consists of tartarized antimony gr. ij., bitartrate of potassa ʒij., dissolved in one quart of flaxseed tea, to be taken in divided doses, in the course of 24 hours. This remedy is not altogether safe; for if the patient should drink a large quantity of it through mistake, it would probably produce very unpleasant symptoms, as tartarized antimony diffused in a large quantity of any fluid is very apt to bring on violent inflammation of the mucous membrane of the alimentary canal, though the quantity taken be not very large. It may be advantageously combined with opium. Some give a dose of opium alone in the commencement of the affection. I prefer, however, this combination, which produces diaphoresis, and often very speedy relief. You may give a fourth of a grain of tartarized antimony, with one-seventh of a grain of sulphate of morphia, or you may vary this to suit the case.

When the disease does not subside at once, after active treatment, the patients generally ask for something for their cough. In these cases many cough mixtures are used, most of which are beneficial in their effects. They contain a narcotic, nauseating, or stimulating ingredient, and sometimes a combination of these, commonly mixed with mucilage of gum arabic, which fulfils the indication of allaying the irritation about the throat. A remedy in very general use is the *Brown mixture*, the composition of which you are well acquainted with. Another common mixture is one, of the syrups of seneca and squills, to which opium may be added if necessary; but you should be very cautious about giving opium in mixtures to children, as the accumulated effect of repeated doses may arrest the secretions, and produce other dangerous results. Certain stimulants are frequently given with advantage towards the close of acute cases, and are very useful in the chronic forms of the disease; these are gum ammoniac, balsam of Tolu, balsam of copaiba, &c. The

precautions necessary to be observed in convalescence, are the same as in other acute diseases. The general indications, therefore, in the treatment of bronchitis, are, if possible, to bring about a cure of the disease by resolution; this rarely takes place without a secretion of mucus from the membrane. Hence, if you prevent the fever and local inflammation from running sufficiently high to impede secretion, either by bloodletting, or nauseating, or stimulating diaphoretics, you produce nearly the same effect. After this object is attained, the local stimulants which tend towards the lungs favor very much the secretion of mucus, which is almost essential for the removal of the disease.

There are several circumstances which modify this affection to a considerable degree. The most important of these is age—the bronchitis of children and of old men being very different from this disease as it occurs in adults.

The bronchitis of children is particularly interesting; it extends usually from the trachea down to the tissue proper of the lungs, involving the whole mucous membrane of the large and small bronchial tubes. Its chief peculiarity is its tendency to pass into lobular pneumonia; indeed, if the bronchitis continue for a considerable length of time, this affection is almost certain to supervene. Secretion takes place very early, and consequently the dry rhonchi do not make their appearance, or continue for so short a time that they escape observation; this is another point in which it differs from the affection as it occurs in adults. As the smaller bronchial tubes are usually affected, we almost always find the sub-crepitant rhonchus, which can be heard at all times, for children do not expectorate, but throw off the accumulated secretion by an effort of vomiting. The chest usually gives a clear sound on percussion, though it is sometimes rendered dull by the accumulation of mucus in the small tubes, and of blood in the tissue of the lungs. These signs are more marked, and more early developed in the right lung, which is more commonly the seat of pneumonia than the left. Besides the physical signs, we meet with a loose cough, orthopnea, and flushing of the face, which, instead of being circumscribed as in the case of adults, extends over the whole face, and is of a purplish color, which is to be ascribed to the imperfect aeration of the blood. There is also at times great febrile excitement, with cerebral symptoms.—*Med. Exam.*

TREATMENT OF CANCER OF THE WOMB.

FROM LECTURES AT ST. BARTHOLOMEW'S HOSPITAL, BY C. WALLER, M.D.

I NEED not tell you, gentlemen, that we possess no remedy which is capable of curing cancerous affections, whether of the womb or any other part, and yet I believe many cases of threatened carcinoma might be averted, had we the opportunity of attacking first symptoms, before the specific character of the disease has developed itself; for, however we may differ in opinion from those who consider cancer to be the mere result of common inflammatory action, still I must again express my belief, that in a multitude of instances, if not in all, inflammation, and that

of a common kind, brings into action what might otherwise have lain dormant in the constitution ; and, further, that where proper attention has been paid to this previous condition of the womb, the development of cancer has been altogether prevented. Two cases recur to my remembrance where the symptoms were those I have described to you as indicating scirrhus, and where there was also that stony hardness which in so striking a manner characterizes this kind of tumor ; nevertheless, both patients recovered perfectly, the hardened deposit being removed by absorption. One of these females was brought exceedingly low, in consequence of frequent hæmorrhage, under which she suffered for upwards of a year. I am inclined, however, to believe that the loss of blood contributed in no trifling degree to the perfection of the cure. The result of this case gave me unmixed satisfaction, and has amply repaid me for many apparently unsuccessful attempts to administer relief in similar circumstances.

Treatment of Scirrhus.—The disease generally, though by no means universally, commences about the 45th year of a female's age, or, at least, makes but little progress prior to the cessation of menstruation, and hence, as before noticed, the necessity of making special inquiry into the state of the uterus at that particular time. The first symptoms are, you have been told, inflammatory, and, therefore, the first remedies must be antiphlogistic ; in determining, however, the extent to which this plan should be pursued, great discrimination is required ; the condition of the uterus, on the one hand, and of the system in general on the other, should be carefully investigated. The local inflammation is sometimes of a very decided character, and the constitution in a vigorous, nay, in a plethoric condition ; and here the propriety of abstracting blood from the arm cannot be questioned. In other cases, and these constitute a considerable majority, general bleeding is improper, and then you will find relief from the application of leeches to the vulva, or cupping glasses to the loins. Carefully observe the effects of the bleeding, both as regards the uterus and the system at large ; it will generally be necessary to repeat the operation occasionally, at intervals proportioned to the circumstances of each individual case. A moderately-relaxed state of the bowels should be constantly preserved, but violent purgatives are decidedly improper ; still, however, it is better to select those which produce a certain degree of watery discharge, as your object is not simply to empty the bowels, but also, in a measure, to lower the system. Perfect quietude of body, in the recumbent position, forms a very essential part of the remedial plan ; and as all powerful mental emotions have the effect of disturbing the circulation, the mind should also be preserved in as tranquil a state as possible. In those whose constitutions have not been enfeebled, the aperient medicines may be employed for a week or two, and then you may have recourse to the mild mercurial plan recommended already to your notice, when we described chronic inflammation of the womb ; the effect of the mercury must be narrowly watched, that the patient may not be weakened by its protracted use. Food should be taken in sparing quantities, and its quality mild and unstimulating ; small doses of ext. of hyoscyami, taken at bed-

time, will often relieve irritability and procure sleep. The proper local applications are those which encourage the mucous secretions of the vagina, such as the warm decoction of poppies or of hemlock, and these ought to be employed at least four times within the 24 hours, the patient using, at the same time, a hip-bath nightly. Even in the early stages of scirrhus uteri, some females are liable to hæmorrhages, and where the quantity of blood lost is considerable, the pain is usually relieved for a time; unless, therefore, it be excessive, no attempts should be made to restrain it; if the loss of blood should be sufficient to weaken the constitutional powers, the common treatment for the arrest of uterine hæmorrhage will be required.

The longer you can retard the ulcerative process the longer you will keep the disease at bay, and as local stimuli must necessarily have a tendency to hasten on this event, it becomes of the utmost consequence for the female, if married, to have a separate bed from her husband. I have just stated the diet should be light, and the quantity such that the stomach may at no time be rendered uneasy from distention. Where there is an acid state of the stomach, no food which has a tendency to pass into the acetous fermentation must be allowed; you will, in these cases, recommend small portions of animal food, broths, and so on, in preference to vegetable diet. Alkaline remedies are here indicated; 15 minims of liquor potassæ, with or without a laxative, as circumstances may require, exhibited twice or thrice a-day, will generally afford relief; or you may prescribe half a drachm of magnesia suspended in a glass of milk.

There is no disease for the cure of which a greater variety of medicines has been, from time to time, recommended. The vegetable kingdom has been explored by some, and conium, aconitum, sarsaparilla, &c., have had their advocates; others have employed the various metals, and have been loud in their praises of the different preparations of iron, antimony, gold, arsenic, &c. All have, however, with the exception of a few unprincipled quacks, at length arrived at the same conclusion, viz., that we possess no specific remedy for cancer.

I must not omit to notice the opinion of a certain physician now living (to whom the term quack is not intended to apply) with regard to the disease, viz., that it may really be cured by a very simple method. According to his notion, all you have to do is to desire the patient to live upon vegetables alone, and to drink nothing but distilled water. Absurd as the practice appears at first view, still I think it not unlikely that the total abstinence from stimulation, which this plan enforces, may, in the *very early stage*, be attended with advantage; but, certainly, not at every period, whether ulceration have taken place or not, as recommended by the author.

These, then, are the remedial means to be made use of in scirrhus of the uterus; and I conclude my observations on the subject by earnestly imploring you not to imagine, because the disease is generally fatal, that therefore nothing can ever be done effectually for the patient's relief. I confidently re-state my conviction, that much may be accomplished *at the commencement*, not only in the way of palliation, but for the eventual

arrest of its progress—insurmountable difficulties, which, it is confessed, we frequently meet with, being the result of delay, this manifestly arising from the slight, and, to the patient, unimportant symptoms which characterize its first and only curable stage.

Treatment of Ulcerated Carcinoma.—The patient's sufferings are, in this stage, greatly increased; the discharge becomes highly offensive, irritating, and greatly increased in quantity; the bloodvessels become destroyed, and hence there are frequent and large effusions of blood. The constitution is greatly impaired, partly, doubtless, from the hæmorrhage, and partly, probably, from absorption of morbid matter into the system; the countenance is sallow, the eyes sunken, the pulse quick and feeble; ulceration advances, and the bladder is opened; the urine then passes involuntarily, and the fætor of the discharges is thereby greatly increased, or the rectum may be ulcerated into, and the patient will then have no control over her fæces. Before this takes place, however, there is difficulty in procuring evacuations, owing to pressure of the surrounding thickened parts upon the bowel. In one case, a difficulty of this kind was produced by the pressure of a number of enlarged and hardened glands situated along the course of the vagina. The inguinal glands frequently are involved in the disease, so that the central parts of the patient become one mass of disease, and this of the most painful kind.

After the occurrence of ulceration, all hopes of a 'cure must be abandoned; but we should endeavor by every means within our power to alleviate the misery of our suffering patient. Her state, however, is truly deplorable, and it frequently happens, that the best directed and most judicious means fail even to afford temporary relief; still it is your duty to make the attempt.

First, then, on the list of palliative measures, I would place cleanliness. Frequent, nay, almost constant ablation of the parts is required, that the acrimonious and highly offensive discharges be not suffered to accumulate, and to become more fætid; these applications must not be used very warm, lest the hæmorrhage be increased; in some cases, indeed, it is necessary to use them perfectly cold, that they may act as styptics to the bleeding vessels; a little chloride of lime may be advantageously added to the liquid employed; the female will thereby be relieved, in part, from the annoyance produced by the unpleasant smell; solutions of the same substance should also be placed in various parts of the room. The bowels are to be emptied rather by enemata than by the exhibition of aperient medicines. The sinking powers of the system must be upheld by a diet somewhat nutritious, but great care should be exercised in this respect, lest an unfavorable degree of over-excitement be produced; in general, no stimulating drink is allowable, although, in some cases, from the great degree of debility and exhaustion which is present, this rule may be departed from. Where the hæmorrhage is alarming, I have known good effects to result from the internal use of the muriated tincture of iron, combined with tincture of henbane; of course the relief is but temporary, for, as ulceration advances, more bloodvessels will be opened, and a repetition of the hæmorrhage follows

of necessity. Something must be done to lessen the agonizing pain, and nothing but opium will answer your purpose. This remedy must not, however, be given in the ordinary doses, or you will altogether fail in your object; you must be guided, gentlemen, not by the number of grains, but by the effect produced. I have known from twenty to thirty grains given within the twenty-four hours, and but little relief was experienced; this large quantity did not produce sleep, and only in a trifling degree did it seem to deaden pain. My usual plan is to exhibit two grains of opium at bed-time, and repeat the dose in the course of a few hours, if necessary. In a case which occurred some months since, ease was procured by adding one grain to the first dose, making it to consist of three grains. As the disease proceeds, emaciation increases, and at length, although, generally, not until after many years of pain, death puts an end to the patient's sufferings. In the dissection of patients who have died of cancer of the uterus, you often find that inflammation has extended to the neighboring parts, the surrounding intestines being frequently glued to the uterus by very tight adhesions.—*Lancet*.

OSTEO-SARCOMA.

[Communicated for the Boston Medical and Surgical Journal.]

Miss —, aged 17, of delicate constitution, and bilious habits, was taken in November, 1839, with soreness and dull pain in or just above the knee-joint. It was supposed by herself and family to be rheumatism, and some stimulating washes were applied, such as pepper and vinegar, &c.; she continued, however, to attend school until February, 1840, at which time the joint began to enlarge rapidly, and to become so painful as to make it necessary to call on a physician. He prescribed sweating, emetics and liniments; which, however, had little or no effect. Another physician was called, who, I believe, prescribed mercury internally and iodine externally, with as little effect as was produced by the former remedies. A third one was called, who prescribed a seton above, and another below the joint, antimonial ointment upon the joint, and the internal exhibition of iodine. All these had no effect, unless it were to cause the disease to progress more rapidly. The joint was kept enveloped in some kind of cataplasm most or all the time, from February until June 30, at which time she died from extreme exhaustion.

On laying open the tumor (which was easily done with the scalpel), it was found to be composed of bony matter, in form more like moss growing from a rock, or an old log, than anything else to which I can compare it; the interstices being filled with a substance appearing somewhat cartilaginous and fatty, together with small follicles containing a gelatinous fluid. Perhaps one fourth of the tumor was composed of bone.

The measurement around the limbs was as follows:—The diseased limb, above the joint, 9½ inches; around the joint, 25. The joint of the well limb was only 10½.

E. R. HOLLENBECK.

Great Barrington, Aug. 3, 1840.

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FRACTURES.

At the late anniversary of the Massachusetts Medical Society, A. L. Peirson, M.D., of Salem, delivered a discourse upon the subject of fractures. In a passing notice of the meeting, we then suggested that the paper read by Dr. Peirson would become good authority in the library. Since looking it over in the transactions of the Association, we are better satisfied of its real worth than before. It is one of those productions that evidence research, extensive observation, and a thorough acquaintance with writers eminent for their professional attainments in operative surgery. Mr. Morland's tables, annexed to the illustrative notes, give us favorable impressions, too, of the pupil. There is no attempt, in the discourse, at surprise—no wonders are related, nor anything like an approach to the poetry of surgery. It is a singular mistake of some of the best practical surgeons, that in commenting upon principles, or in stating circumstances, they imagine that anomalous exhibitions will alone fix the attention of the reader. Hence the weight of character which they should and would have, in some instances, is overshadowed by marvels. But plain statements are deliberately consulted by judicious, thinking men, who are influenced by them, and who carry out good sound principles in the details of every-day practice. Dr. Peirson's essay on fractures will do credit anywhere to Massachusetts surgery. It is not to be supposed that Dr. P. claims that the doctrines he inculcates are solely and exclusively his own. He has collected, condensed, and systematically arranged, the opinions of others; but the agreeable manner of doing it belongs alone to himself. There was no particular need, however, of defining the word *fracture*, or detailing the chemical elements of bone, before an audience of able practitioners.

The kinds of *displacement*, *retraction*, *overlapping*, *rotation*, *flexion*, *lateral slidings*, are each of them scientifically adverted to—not in a farago of endless description, yet just enough is said to impress the memory of a student, who without much effort might repeat the whole discourse in a recitation. His observations on the causes of fracture, symptoms, and the mode of union, although collected for the simple purpose of whiling away an hour, according to the usages of the institution, may be fairly appealed to by any of us as an excellent specimen of what a surgical lecture should be. Under the head *treatment* we conceive that Dr. Peirson has done himself honor; and he is entitled to praise on the score of simplicity. If anything is intolerable in medical writings, it is a prosy, sleep-disposing theory. Give us the facts, in the fewest words, so expressed that there may be no misapprehension about the meaning of phrases.

Were we bent on fault-finding, which, happily for our personal comfort, is not the case, room would be found for some generous criticism. But we assure the reader that the discourse is, taken all in all, a capital textbook and manual on fractures—having a great deal in a little space. It ought not to mould away unseen, in an unbound pamphlet, confined to the boundaries of Massachusetts.

Pennsylvania College.—It may not, perhaps, be known to all, that Pennsylvania College is located at Gettysburg—and that a special act of legislation authorizes the medical faculty of that institution to confer medical degrees. We suppose, too, that the same law empowered them to settle in Philadelphia, as the most convenient place for completing the education of young gentlemen entering upon the profession of medicine. From the prospectus, it seems that the opportunities are ample for studying the minutest details of practice; and with regard to anatomical pursuits, Dr. S. G. Morton fills the chair. But to make the course of instruction as complete as possible, arrangements have been made with Dr. McClintock, of College Avenue, to teach a practical knowledge of that essential department, the foundation of all other attainments in the science of life. Last season, some one writes on the margin, there were about 85 students.

Boston Lunatic Asylum.—Dr. Butler's first report, to the City Council, is a document that will be read with pleasure by philanthropists. Although the institution has been but a little while in existence, it has assumed the order and method of those more extensively known to the community. The whole number of cases admitted was 104, of which 67 were males and 47 females. On the first of July, there were 87 inmates—of which 31 were foreigners, and 56 belonged to the United States. Nine have recovered—showing that it is not a hospital of incurables. As a majority of the subjects are derived from discouraging sources, some being demented, and others hereditarily deranged, the superintendent must exercise an uncommon share of patience in his unwearied efforts to better their mental condition. We look forward to very gratifying results if the system of moral management, now so happily begun, operates in future as it has in the beginning.

Temperance in Massachusetts.—Some one has kindly furnished us a copy of an address on this all-exciting topic, by Mr. J. H. Purkit. There seems to be fewer propositions or statements in it to interest the mere physician, than ordinarily characterize such discourses. However, that it is the medicine that is needed for the morally depraved through the vice of intemperance, cannot be questioned. We should like exceedingly to receive from Mr. Purkit some of the statistics of drunkenness in this Commonwealth. Such a paper would be greatly prized by the profession, and could be used by all who are well-wishers to the progress of temperance principles, with reference to the future.

Smallpox at Nantucket.—Three deaths have recently been caused at Nantucket by smallpox. It is presumed that vaccination has not been neglected. Should the disease creep into the whaleships, and develop itself at sea, the sufferings would be far more intense than it has yet been in vessels merely crossing the Atlantic from Europe to America. No whaler should be permitted to leave Nantucket without a good supply of virus, accompanied by instructions for using it.

Albany Medical College.—This spirited school, which is admirably organized, according to the statements of the new prospectus is nearly in

readiness for beginning the annual course of lectures. The term, however, opens on Tuesday, the third day of November. From all we can discover, the prospect is very flattering for the institution—nor is it less so for those who are educated in it.

Biliary Calculi voided by the Urethra.—Dr. Faber details the history of this very curious disease. The person affected was a female, and did not indicate the passage of gall-stones by the ordinary symptoms, nor was any disease of the liver suspected; she never had jaundice, but had suffered lately, for a considerable time, with pains and tenderness in the hypogastric region, and tenesmus of the bladder; her urine had become yellow, green, and brownish; more recently she had observed several small calculi to escape from the urethral canal. Chemical analysis proved these calculi to contain the same constituents as ordinary gall stones. At length the pain in passing the urine became so great that it was deemed necessary to cut into the bladder to extract a large calculus. The woman eventually recovered.

Of the numerous cases of biliary calculi referred to by Dr. Faber, one only, recorded by M. Barraud, presented any similarity to the foregoing. As for the explanation of this singular fact, there are but two ways of accounting for it, either by supposing that the calculi were formed in the hepatic ducts, and thence passed into the bladder through a fistulous communication, or that the principles of the bile were deposited in the pelvis of the kidney, and formed the calculi in that organ. Dr. Faber inclines to the latter opinion.—*Gazette Médicale.*

Cysticercus of the Brain.—M. Bouvier recently presented to the Royal Academy of Medicine an example of this entozoon, which he found in the brain of a woman aged 83 years. She had been admitted into the hospital on the 30th of Dec., 1839, presenting no other symptoms than slight feebleness of the intellectual faculties, with some loss of muscular power of the left leg. Eight days afterwards she was seized with pneumonia, and died without any other symptom of cerebral derangement. On examination, after death, a great number of cysticerci were found on the surface of the hemispheres, in the membranes, cortical substance, optic thalami, corpus callosum and cerebellum. Each cysticercus was enclosed in a small cyst, slightly adherent to the surrounding parts. The volume of the animal did not exceed that of a large pea, and seemed to consist, in great part, of a transparent vesicle, containing a very minute oval body, which is the cysticercus itself, rolled up. In a few examples, a point, like the head of a pin, could be discovered at the extremity of the ovoid; this is the head of the worm, and, on drawing it gently out, the animal is unrolled, and presents the exact appearance of the figure depicted by Bresner.—*Bul. de l'Acad.*

Operations for the Cure of Deformities.—In a late number of the French "Medical Gazette," M. Guerin gives the following list of parts which he has divided by the method of sub-cutaneous incisions:—

1. *Neck*—Sterno-cleido-mastoid; trapezius; levator anguliscapulae; splenius; complexus; cervicalis ascendens. 2. *Back*—Trapezius, from its insertion along the scapula; rhomboideus; latissimus dorsi; sacro-

lumbalis; longissimus dorsi; intero-transverse fasciculi of the spine; 3. *Upper Extremity*—Deltoid; biceps; long supinator; flexor carpi radialis; flexor carpi ulnaris; superficial flexor and common extensor of the fingers. 4. *Lower Extremity*—Psoas and iliacus; long adductor; sartorius; rectus femoris; tensor vagina femoris; glutei; biceps; semi-tendinosus; semi-membranosus; tendo-Achillis; tibialis anticus and posticus; long and short flexors; the extensor, abductor, and adductor muscles; the peronei. 5. *Fascia and Ligaments*—Fascia lata and plantar fascia; sterno-clavicular ligament; scapulo-humeral; coxo-femoral; lateral of knee-joint; lateral and posterior of ankle-joint; astragalo-scaphoid capsule; scaphoido-cuneiform.—*Gaz. Med.*

Ligature of the common Iliac Artery for Aneurism.—M. Deguise, a French surgeon, has recently performed this operation with success. During the operation, the aneurismal sac, which occupied the external iliac artery, was accidentally opened, and gave rise to copious hæmorrhage; but this was readily arrested by compressing the aorta. Fearing that bleeding might occur from the inferior orifice of the iliac, or from the sac, the surgeon tied the femoral artery just below Poupart's ligament, but here again an accident occurred. The femoral vein was divided by the bistoury, and tied. Notwithstanding these untoward circumstances, the patient recovered in a couple of months.—*Ibid.*

Luxation of the second Cervical Vertebra of seven months' standing—Reduction—Cure.—M. Jules Guerin has succeeded in effecting the reduction of a dislocation of the axis, which had been produced seven months before, by a fall on the chin. M. Guerin was fortunate enough, after repeated trials, to bring the displaced vertebra gradually to its right position. All the external signs of the dislocation soon disappeared, and in three months the patient was able to execute all kinds of motion of the head and neck. We shall communicate to our readers this interesting case as soon as M. Guerin has published it in detail.—*London Lancet.*

Exostosis of the Femur—Operation.—J. S., aged 9, was admitted Feb. 22, 1840, into the University College Hospital. Six months ago he perceived a small swelling on the inside of the lower part of the left thigh; this gradually increased until his admission; he had never suffered any pain or inconvenience from it. There is a swelling of about the size of a walnut, a little above the condyle, and apparently connected to the femur. Mr. Liston determined on removing it, and having made an incision in the direction of the fibres of the vastus internus muscle, a small cartilaginous exostosis was exposed, having a narrow neck, and connected near to the condyle. With the cross-cutting pliers and the straight bone forceps, the diseased growth was quickly removed. A small artery, which bled, was tied, and the ligatures were cut off close to the knot. In the evening the wound was brought together with some strips of isinglass plaster.

March 15. The wound is nearly well. Some little erythema occurred a few days after the operation, and the wound would not unite by the first intention. The strips of plaster were soon removed, and the wound granulated and healed by that process.—*Ibid.*

The Bicarbonate of Potash in Diarrhœa.—During the period of dentition, children are often liable to diarrhœas of greenish stools (from four to six in the 24 hours), mixed with mucosities, and accompanied by vomiting and colicky pains. These derangements of the digestive organs are owing to the presence of too great a quantity of acid in the stomach. No sooner does the milk reach the stomach than it coagulates, and is immediately thrown up by the child. The preparation best adapted to this condition of the stomach, is the sugar of Vichy, which consists of two drachms and a half of bicarbonate of potassa, mixed with eight ounces of double refined sugar pulverized. It is administered to children in a spoonful of water. If it is not retained, from half a drachm to a drachm of the same salt is to be taken by the nurse, by which means the milk becomes more alkaline, and a portion of the acid of the stomach is neutralized. This remedy, sufficiently long persisted in, has saved the life of many an infant, who, as is well known, most usually fall victims to diseases of the intestinal canal.

In adults, the alkaline bicarbonate is of the same service. When the secretion of the acid is too active during digestion, the unpleasant results occasioned are well known—diarrhœa, and sometimes vomiting. The patient should in this case drink a bottle of Vichy water a day. This, given to a healthy man, would produce constipation in a short time.—*PROF. MARTINS, in Medical Examiner.*

Medical Graduates for 1840 in the United States.—The University of Pennsylvania, 163; Medical College of South Carolina, 65; Transylvania University, 60; Jefferson Medical College, 57; Medical Institute of Louisville, 39; Medical Department of Pennsylvania College, 28; Medical Institution of Geneva College, 19; Washington University of Baltimore, 19; University of Maryland, 14.—*Ibid.*

Of the 40 deaths in Boston last week, recorded in our report, 21 were of children under two years of age. The proportion was nearly the same in the city of New York.

To CORRESPONDENTS, &c.—The communications of Drs. Hollenbeck and Wheeler will be inserted next week.—The title page and index of last volume will be sent out as soon as printed.

DIED.—In Hanson, Dr. Samuel Barker, 78.—In Hartford, Ct., Dr. Thomas Greene, of Providence, R. I., 76.

Number of deaths in Boston for the week ending Aug. 8, 46.—Males, 22—females, 18. Stillborn, 4.

Of consumption, 1—bowel complaint, 3—infantile, 4—cholera infantum, 4—brain fever, 1—teething, 2—marasmus, 3—dropsy on the brain, 1—apoplexy, 1—dysentery, 5—old age, 3—inflammation of the bowels, 1—child-bed, 2—cancer, 1—typhous fever, 1—drowned, 2—disease of the heart, 1—scarlet fever, 1—canker, 1—jaundice, 1—intemperance, 1—lung fever, 1.

BOYLSTON MEDICAL PRIZE QUESTIONS.

THE Boylston Medical Committee, appointed by the President and Fellows of Harvard University, consists of the following physicians, viz.:

JOHN C. WARREN, M.D.

RUFUS WYMAN, M.D.

GEORGE C. SHATTUCK, M.D.

JACOB BIGELOW, M.D.

WALTER CHANNING, M.D.

GEORGE HAYWARD, M.D.

JOHN RANDALL, M.D.

EMORY HALE, M.D.

JOHN WARE, M.D.

At the annual meeting of the Committee on Wednesday, August 5th, 1846, the Boylston premium of fifty dollars value was awarded to W. W. Gerhard, M.D., of Philadelphia, for a dissertation on "the pathology and treatment of typhus and typhoid fever," with the motto, "Je sais que la verité est dans les choses, et non dans mon esprit que les jugs." The other Boylston premium of the same value was adjudged to Joseph Sargent, M.D., of Worcester, Mass., for a dissertation on "the patholo-

gy and treatment of medullary leucæmia," with the motto, "On observe la nature; on ne la divine pas."

The following prize questions for 1941, are already before the public, viz.: 1st. "To what extent is disease the effect of changes in the chemical or vital properties of the blood?" 2d. "The structure and diseases of the teeth; with a numerical solution of the question, can caries of the teeth be retarded by mechanical processes?"

Dissertations on these subjects must be transmitted, post paid, to John C. Warren, M.D., Boston, on or before the first Wednesday of April, 1941.

The following questions are offered for 1942. 1st. To what extent is the human system protected from smallpox, by inoculation with the cowpox? Is the protection increased by re-vaccination; and if so, under what circumstances? 2d. On the diseases of the kidney, and the changes which occur in the appearance and composition of the urine, in health and in disease.

Dissertations on these questions must be transmitted as above, on or before the first Wednesday of April, 1942.

The author of the best dissertation on either of the above subjects, will be entitled to a premium of fifty dollars, or a gold medal of that value, at his option.

Each dissertation must be accompanied by a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they have been received.

By an order adopted in 1935, the Secretary was directed to publish annually the following vote, viz.:

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

ENOCH HALE, Secretary.

Publishers of newspapers and medical journals, throughout the United States, are respectfully requested to insert the above notice.

Boston, Aug. 6, 1940.

A 12.—41

REGISTER OF THE WEATHER,

Kept at the State Lunatic Hospital, Worcester, Ms. Lat. 42° 15' 49". Elevation 483 ft.

1940.	THERM.			BAROMETER.			Wind.	Weather.	Remarks.
	C.	F.	d.	C.	F.	d.			
July.									
1 Wed.	65	79	71	29.50	29.50	29.50	N W	Fair	
2 Thur.	50	73	70	29.45	29.50	29.50	N W	Fair	
3 Frid.	60	68	66	29.61	29.65	29.65	N E	Cloudy	Light showers.
4 Satur.	50	74	73	29.60	29.65	29.65	S E	Fair	Very pleasant day.
5 Sun.	57	69	74	29.63	29.74	29.75	N	Fair	Fog in the forenoon.
6 Mon.	60	74	67	29.75	29.75	29.75	N E	Cloudy	Foggy morning.
7 Tues.	65	67	67	29.70	29.67	29.65	N E	Cloudy	Light shower in the morning.
8 Wed.	64	73	69	29.60	29.55	29.51	S W	Fair	Shower at 1 P. M.
9 Thur.	65	63	68	29.56	29.50	29.56	S W	Cloudy	Fine shower at 6 P. M.
10 Frid.	64	61	75	29.25	29.34	29.41	N W	Fair	
11 Satur.	55	61	76	29.40	29.49	29.40	S W	Fair	
12 Sun.	64	66	70	29.40	29.50	29.47	S	Fair	
13 Mon.	64	60	73	29.40	29.30	29.50	S	Cloudy	Foggy morning. Shower at midnight.
14 Tues.	72	63	70	29.15	29.15	29.20	W	Fair	Shower at 11 A. M.
15 Wed.	68	69	61	29.32	29.30	29.43	S W	Fair	
16 Thur.	69	61	63	29.47	29.50	29.51	W	Fair	
17 Frid.	69	60	60	29.50	29.49	29.47	S W	Fair	Dry season.
18 Satur.	74	70	70	29.44	29.50	29.48	S W	Cloudy	Light showers.
19 Sun.	72	63	71	29.30	29.23	29.23	S W	Fair	Showery in the afternoon, with high wind.
20 Mon.	50	70	69	29.30	29.50	29.47	N W	Fair	
21 Tues.	58	78	74	29.43	29.47	29.50	S W	Fair	
22 Wed.	50	63	70	29.55	29.61	29.60	S W	Fair	
23 Thur.	63	70	70	29.50	29.50	29.47	S	Fair	Began to rain at 9 o'clock, P. M.
24 Frid.	60	75	73	29.25	29.11	29.11	N W	Fair	Rain continued till 11. Afternoon showery.
25 Satur.	64	60	74	29.33	29.54	29.60	N W	Fair	Pleasant day. Aurora borealis.
26 Sun.	61	60	73	29.61	29.63	29.64	S W	Fair	Foggy morning.
27 Mon.	64	62	76	29.66	29.70	29.66	S	Fair	Showery in the afternoon.
28 Tues.	61	60	74	29.60	29.50	29.40	S	Fair	Fine shower in the night.
29 Wed.	68	63	74	29.36	29.30	29.30	S W	Fair	High wind. Aurora borealis.
30 Thur.	62	78	74	29.50	29.55	29.54	S W	Fair	Smoky day.
31 Frid.	61	60	76	29.60	29.61	29.60	S W	Fair	

July has been a favorable month for the farmer. Crops of hay and grain are abundant, and have been well secured. The latter part of the month has been dry. Range of the thermometer, from 55 to 91; barometer, from 29.06 to 29.75. There have been frequent showers, but no severe thunder storms.

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W H Wheatland